

Chapter 3

Organization and Management of the Quality System

This chapter provides a brief overview of the Office of Water organizational structure and a detailed description of the Office of Water's quality system, including responsibilities within that system. As an Office of Water employee, you need to understand your responsibilities for implementing this plan. For ease of reference, responsibilities are divided into two areas: program staff who are responsible for managing and implementing projects within the Office of Water and quality system staff who are responsible for assisting with and overseeing quality management activities. A third section focuses on the unique set of roles and responsibilities required to manage quality in programs which are delegated to Regions, States, and Tribal governments.

Organization of the Office of Water

The mission of the Office of Water is to protect the nation's water resources. To accomplish this mission, the Office of Water is divided into five major program offices. Each program office, other than the American Indian Environmental Office, is divided into two or more divisions, and most of those divisions are subdivided into two or more branches (see **Exhibit 2**). Because the branches are the origin of many of the decisions that are based on environmental data, they also form the basis for the structure of the Office of Water quality system. The five program offices are:

- American Indian Environmental Office (AIEO),
- Office of Ground Water and Drinking Water (OGWDW),
- Office of Science and Technology (OST),
- Office of Wastewater Management (OWM), and
- Office of Wetlands, Oceans, and Watersheds (OWOW).

The program offices are currently supported by:

- Management and Operations Division,
- Water Policy Division,
- Resource Management Division, and
- the Communications Team.

These three staff divisions and the communications team do not have an active role of their own in environmental decision-making. As a result, the support that they provide to the rest of the Office of Water is not specifically addressed in this quality management plan. However, the principles of the Office of Water quality system still apply and staff in these divisions are encouraged to apply them to their daily activities.

Organization of the Quality System

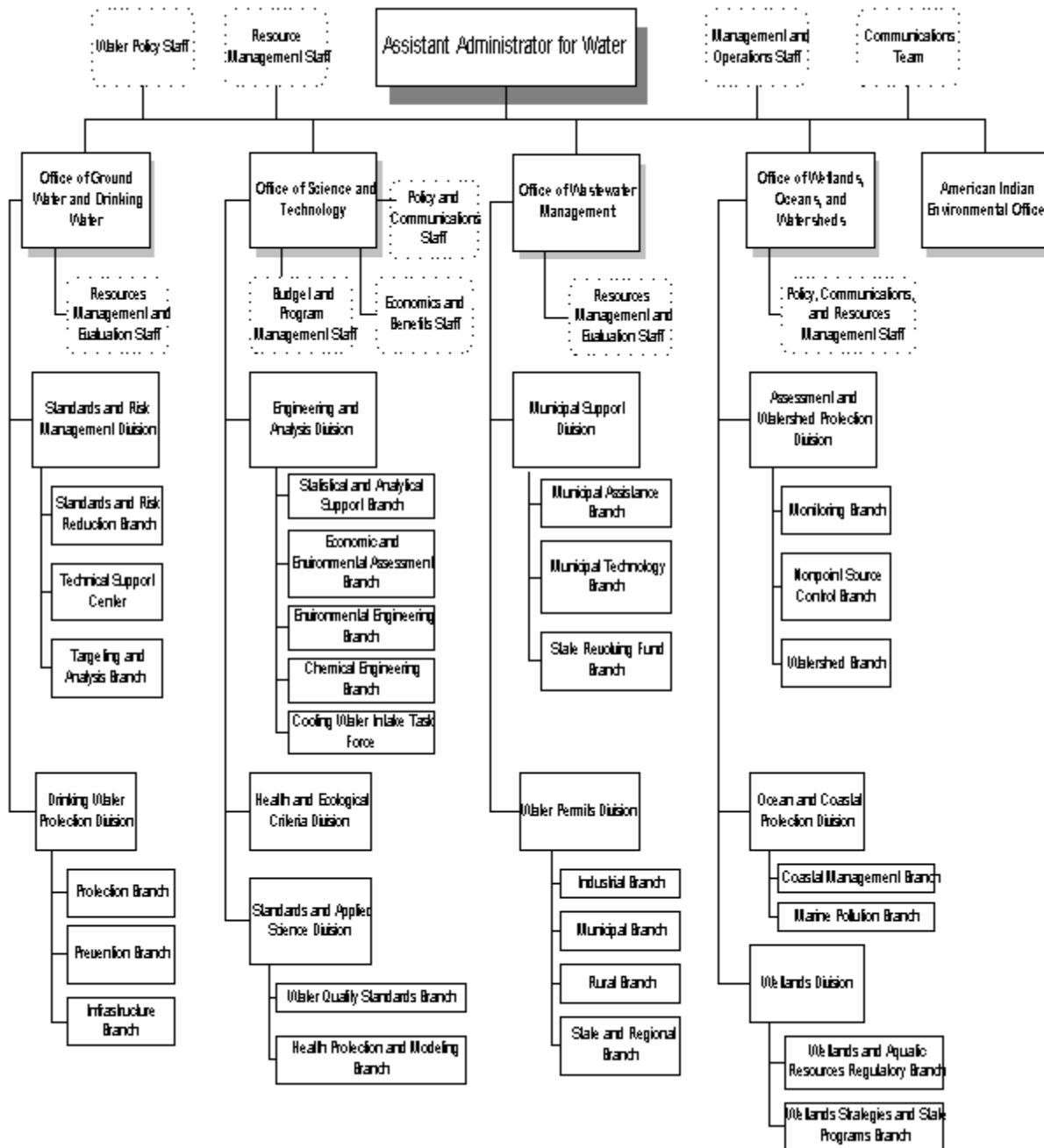
A fundamental principle of any quality system is that the system must receive direction from the top down and be implemented from the bottom up. A quality system cannot be imposed on any organization from above, nor overlaid on the organization without being incorporated into the organization's culture.

Accordingly, *everyone* in the Office of Water has some role to play in ensuring the quality of the products of the Office of Water and everyone has a responsibility to do their best. However, there are a small number of individuals with specific roles which must be fulfilled

***"If you're not part of the solution,
you're part of the problem"***

within the quality system itself.

Exhibit 2 Office of Water Organization Chart



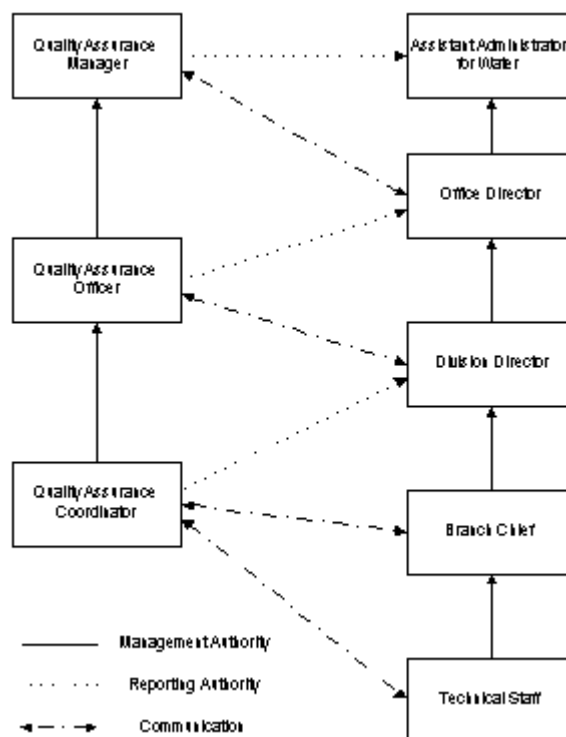
The roles of these individuals are divided into two "tracks," one specifically for program staff, and the other for those who specialize in managing the quality system itself, as shown in **Exhibit 3**.

Note: If a Division has no branches, then the role of the Branch Chief may be filled by an Associate Division Director. In addition, within some parts of the Office of Water, the Quality Assurance Coordinator may be assigned at the Division level, rather than the Branch level. In these instances, the Quality Assurance Coordinator will function at the Division level.

Contrary to common perception, the purpose of the two tracks is *not* to separate the responsibility for quality from the routine management activities. Rather, the separate track for the quality system staff is designed to ensure that the *management of the quality system itself is independent of routine management*.

The staff within the quality system are responsible for the day-to-day functioning of the quality system. In order to do that effectively, these positions function independently of the line management structure. *This is another fundamental tenet of any quality system.*

Exhibit 3 Generic Quality System Organizational Structure



The solid lines indicate management authority within each track. The dotted lines indicate reporting authority between the two tracks. As indicated, the staff in quality system roles report information on the status and success of the quality system to the management level above the one in which they function. Finally, there are lines of communication between both tracks at every level. The communication lines are shown with arrows at each end to emphasize the need for communications in both directions.

Program Staff Responsibilities

Role of Management

Every member of the management structure within the Office of Water is responsible for *implementing* the quality system. There are costs associated with producing quality work and for managing quality. However, those costs are generally far less than the cost of redoing the work to achieve a quality product or to defend against a poorly-made decision. Managers are responsible for allocating resources (budget and staff) to every project undertaken within their part of the Office and those resources must be sufficient to carry out the technical work and ensure its quality. Managers set schedules and establish priorities, both of which must reflect the demands of quality management. One of the most important functions which the managers perform in the quality system is communication, both up and down the management chain. It is the managers who can communicate the importance of quality within the organization and who can most readily affect its incorporation into the organization's culture. While communications may focus on specific quality problems, managers must also communicate the need for quality training, staff and budget resources, and systematic planning.

The quality system responsibilities of the four levels of management from the Assistant

Administrator for Water to the Branch Chiefs are summarized in **Exhibit 4** and are based on the requirements described in EPA Order 5360.1 A2. These managers maintain frequent communication and work in concert with the quality system staff within the Office of Water to manage the quality system and incorporate it into all environmental decision-making activities within the Office that rely on environmental data. The quality system functions from the bottom up, such that the responsibility at each level of management builds on the efforts of the levels below.

Exhibit 4
Quality System Responsibilities of Office of Water Managers

Management Responsibility	Assist. Admin.	Office Director	Division Director	Branch Chief*
Compliance with the quality system by EPA staff	●	●	●	●
Communicating the importance of quality to staff	●	●	●	●
Providing adequate resources for the quality system, including training, travel, staff and budgets	●	●	●	●
Ensuring that decisions are supported by data of known quality	●	●	●	●
Compliance with the quality system by delegated programs	●	●		
Compliance with the quality system of extramural organizations	○	●	●	
Performance agreements contain quality system standards	●	●	●	●
Quality system training is provided to staff	○	●	●	●
Systematic planning of all projects within the organization	○	○	●	●
Assessment of data quality		○	●	●
Determining the need for quality system training		○	●	●
Participation in systematic planning		○	○	●
Approval of project planning documents			○	●
Approval of the Office of Water quality management plan	●	●		
Periodic evaluations are conducted of internal and external organizations	●	●	●	●
Documenting quality management activities within the organization	●	●	●	●
Sampling, analysis, and data handling procedures meet quality system requirements and are documented, reviewed, and approved			○	●
Identifying need for SOPs		○	●	●
Ensuring implementation of corrective actions within the organization	○	●	●	●

● = Primary management responsibility *In a Division with no Branches, this is the Associate Division Director
○ = Oversight responsibility

Roles of Work Assignment Managers and Project Officers

Although they fall outside of the line management chain, Work Assignment Managers, Task Order Managers, and Project Officers play important roles in implementing the quality system, particularly in regard to the activities of contractors and grantees. If you manage activities under a contract or grant, refer to **Exhibit 5** to identify specific responsibilities that you have for implementing

the quality system within that vehicle.

Exhibit 5
Quality System Responsibilities of Work Assignment Managers and Project Officers

- Participating with senior program staff and technical personnel in systematic planning for the project, including the development of project objectives, the associated measures of quality, and acceptance criteria (see Chapter 4 and Attachment A)
- Identifying the resources needed for the project, including quality system training needs, and requesting funding from the Branch Chief to meet those needs (see Chapter 4)
- Coordinating with the Quality Assurance Officer in the selection and design of reviews, audits, or other performance evaluations appropriate for the project (see Chapter 4)
- Identifying and implementing project-specific quality management procedures, which may include data quality assessment, information management, data integration, and data validation (see Chapter 4)
- Completing the Quality Assurance Review Form for any extramural projects involving environmental measurements to indicate the quality system requirements that must be included in the development of a Request for Proposal (see Attachments C and D)
- Ensuring that work assignments, work plans, and contract deliverables include quality system documentation appropriate for the activity (see Attachments D and E)
- Preparing and implementing quality system documentation appropriate for the project (see Chapter 5 and Attachment A)

Role of Technical Staff

As noted earlier, quality systems are implemented from the bottom up and all Office of Water staff play a role in the quality system. Technical staff involved in the generation or use of environmental data are responsible for complying with this plan. This includes:

Reviewing and understanding the quality requirements that are specific to your project(s)

- Implementing and documenting your quality management activities (see Chapters 4 and 5 and the attachments to this plan)
- Reporting any quality management concerns to your supervisor or Quality Assurance Coordinator

Quality System Staff Responsibilities

A hierarchy of quality system staff oversee the implementation of the Office of Water quality system. As shown in Exhibit 3, three specific titles are assigned to staff managing the quality system:

- Quality Assurance Coordinators, typically assigned to each Branch within the Office of Water
- Quality Assurance Officers, assigned to each Program Office
- Quality Assurance Manager, the individual assigned to the Office of Water

Note: Within some parts of the Office of Water, the Quality Assurance Coordinator may be assigned at the Division level, rather than the Branch level. In these instances, the Quality Assurance Coordinator will function at the Division level.

As noted earlier, the roles of these staff are to make sure that the quality system functions on a day-to-day basis. In order to do that effectively, these positions function independently of the line management

structure. *This is another fundamental tenet of any quality system.*

Ideally, each of these quality system positions would be staffed by individuals who are able to dedicate 100% of their time to their quality system roles. In reality, the Office of Water must balance the resource constraints of budgets and staff levels against a variety of other factors including legislative mandates and judicial schedules. As a result, most of the staff fulfilling these quality system roles do so only part time, and also fill technical roles within each of their organizations. When performing work within the quality system, they report to management as described in this plan. When performing technical work, they report to the level of management appropriate for the technical work. Therefore, these individuals must ensure that they are not performing reviews associated with the quality system of work to which they made substantive technical contributions. The structure described here provides a sufficient number of Quality Assurance Coordinators to allow them to cross between Branches when needed to avoid such conflicts. Likewise, the Quality Assurance Officers and the Quality Assurance Manager can share and/or delegate responsibilities for certain projects in which one or the other has played a technical role.

Quality Assurance Manager

The Quality Assurance Manager serves as the focal point for implementation of the quality system and is responsible for office-wide quality management efforts through a network of Quality Assurance Officers and Quality Assurance Coordinators located in the program offices. The Quality Assurance Manager reports to the Assistant Administrator for Water on all quality matters, and assists line management in interpreting EPA quality policy and in developing quality policy and procedures for the Office of Water. The Quality Assurance Manager is responsible for all quality management activities including the following:

- Development and revision of the quality management plan
- Development of office-wide quality policies and procedures
- Development of the Quality Assurance Annual Report and Work Plan
- Performing audits and reviews, and oversee the implementation of internal and external quality management evaluations
- With the assistance of the Quality Assurance Officers, oversee the annual review process for all quality system programs including those delegated to Regional offices, States, Tribal, local, and other governmental bodies.
- Serving as the liaison between Office of Water and the Quality Assurance Managers in other programs. This function includes participation in QA conference calls and the Annual National QA Meeting sponsored by the Office of Environmental Information.
- Coordinating Agency-wide and interagency quality functions.

The Quality Assurance Manager has the authority to carry out these responsibilities and to bring to the attention of the Assistant Administrator any issues associated with these responsibilities.

Quality Assurance Officer

The Quality Assurance Officer's primary responsibilities are to oversee all aspects of quality system activities within the Program Office. The Quality Assurance Officer reports directly to the Office Director and the Quality Assurance Manager regarding QA matters. Specific activities include:

- Recommending or developing approaches needed to manage quality (e.g., manual or automated systems to identify or track the planning, reviewing, and implementation of data collection projects, reviewing results, or documenting project activities)

- Assisting staff scientists and project managers in identifying needs for and developing quality policies and documents and in obtaining answers to technical quality questions
- Assisting the Quality Assurance Manager in interpreting EPA quality policy
- Developing audit materials and performing reviews, audits, and management system reviews
- Providing input to the quality management plan
- Contributing to the Office of Water's Quality Assurance Annual Report and Work Plan
- Participating in the Annual National QA Meeting sponsored by the Office of Environmental Information

The Quality Assurance Officer works closely with management to ensure that:

- Quality system requirements are integrated into Federal regulations and into the programs operated by Regions, as well as State and Tribal governments and the regulated community, to ensure that data of known and documented quality are generated by program offices and their delegated programs
- Audits/reviews are conducted with sufficient depth and frequency to ensure adherence to approved plans, and to identify deficiencies in the quality system
- Appropriate corrective actions are implemented in a timely manner in response to audit/review findings
- All Office of Water personnel, contractors, and grantees who are involved in the collection and use of environmental data have access to needed quality system training or information
- Appropriate quality system requirements are included in all contract solicitations, assistance agreements, and interagency agreements which entail data collection, and that those requirements are met.

Quality Assurance Coordinator

The Quality Assurance Coordinator's major responsibility is to assist the Quality Assurance Officer in the implementation of the quality system. The responsibilities of the Quality Assurance Coordinator are to oversee the day-to-day quality management activities within the Branch (or Division), implement quality system policies under the direction of the Quality Assurance Officer and the Quality Assurance Manager, and serve as the contact person for the technical staff. The Quality Assurance Coordinator reports directly to the Division Director and the Quality Assurance Officer regarding quality management matters. Specific activities include:

- Reporting to management on the status and requirements of the Branch's (or Division's) quality system activities and acting as a conduit for quality management information to Division and Office staff
- Serving as the central point for coordinating all Branch (or Division) quality management activities, including auditing, reviewing, and resolving quality issues
- Reviewing and approving all internal, contractor, and grantee quality system documentation as well as the quality sections of all regulations, program guidance, procurement guidance and grants
- Identifying quality training needs and implementing the training
- Providing guidelines for content and format of quality system documentation, including standard operating procedures, quality assurance project plans, and other planning documents
- Tracking the preparation, review, and approval of quality system documentation
- Preparing requested sections of the Office of Water's Quality Assurance Annual Report and Work Plan and reviewing the quality section of Branch and Division reports

The Quality Assurance Coordinator works closely with line management to ensure that:

- Appropriate planning and quality system documentation are prepared for all activities involving the collection or use of environmental data and are approved in writing by management and quality

- system staff at the appropriate levels
- Quality system procedures conform to Agency quality system guidance and requirements
- Routinely used procedures that affect data quality are described in standard operating procedures or other appropriate documentation
- Ensuring that all Branch (or Division) personnel receive training in quality system requirements

Delegated Programs - Responsibilities Outside of the EPA Headquarters Structure

Many programs within the Office of Water are delegated to EPA Regions, States, or Tribal governments. Specific quality management responsibilities that reflect the limited role of the Office of Water staff involvement in these activities are defined below. Chapter 9 of this plan also addresses aspects of delegated programs, in the context of using financial assistance (grants and assistance agreements) and project partnership agreements to implement appropriate quality management in such programs.

Activities Delegated to EPA Regions

Office of Water staff work closely with staff in all of the EPA Regions. The relationship between the Office of Water and the EPA Regional offices varies on a program-by-program basis. The Office of Water is responsible for overall policy, guidance, and regulation development. Management of day-to-day activities of Regional water programs is the responsibility of the Directors within each Regional office. Regional Quality Assurance Managers, typically working under the direction of the Regional management officials, develop and oversee implementation of the Regional quality systems. These systems set Regional priorities and policies regarding quality management practices. For programs that are directly implemented by the Region, the Regional quality system takes precedence over the Office of Water quality system in areas where Regional policies and/or procedures are more comprehensive or stringent.

For Office of Water programs delegated to the EPA Regions, oversight and coordination of day-to-day quality management activities are performed by the Regional Quality Assurance Officers or their representatives, including responsibility for assuring that the program participants implement quality management protocols and coordinate their quality system policies with those of the Region.

Notifying the Region of projects that require Regional oversight is accomplished through the financial-assistance and contractual processes described in Chapter 9 of this plan. The responsibilities of the Regional Quality Assurance Officer may include reviewing and approving quality system documentation, planning and performing audits and reviews, reporting audit findings, and training Regional, State, Tribal, local, and other government personnel.

The Office of Water Quality Assurance Officers provide guidance and support to the Regional Quality Assurance Officers in monitoring specific Office of Water programs that have been delegated to Regional offices when requested and/or as needed. These activities may include training, interpreting Office of Water quality system policies, developing guidance documents, and reviewing and approving quality system documentation when requested.

Delegated States, Tribal, Local, and Other Governmental Bodies

In cases where Office of Water programs are delegated to States or Tribal governments, the delegated organization is responsible for implementation of a quality system that complies with EPA quality system policies and guidance from the Regional office. The Regional Quality Assurance Managers or their representatives are responsible for ensuring that every State or Tribe within their Region develops, documents, and implements a quality system that meets the Office of Water, EPA

Quality Staff, and Regional requirements. The Regional Quality Assurance Managers are also responsible for review and oversight of State and Tribal government quality systems.

Oversight of Delegated Programs

In accordance with the policies described in the EPA Delegations Manual (1200 TN 390, February 1995), when authority is delegated to an organization other than EPA, that organization is responsible and fully accountable for any actions it takes in exercising that authority. The Office of Water ensures that delegated programs are implemented according to EPA policy and guidance through the use of a differential oversight policy established in a Performance Partnership Agreement with the State, Tribal, local, or other government body. The Office of Water measures the performance of the delegated program using program results, feedback from stakeholders, and communications between Office of Water staff and the other organization. These communications vary with the nature of the delegated program, program maturity, and available resources, and may include site visits, meetings, and conference calls.

Dispute Resolution

An important aspect of the Office of Water quality system is frequent and open communication among and between the parties with management responsibilities and quality system responsibilities. One goal of those communications is to avoid disputes. However, when issues regarding quality system activities are in dispute, resolution should be sought at the lowest management level practicable. To ensure independence, quality system staff from the next higher level within the organization will assist management in the resolution (e.g, if the issue is to be resolved by a Branch Chief, then the Quality Assurance Officer above that Branch should be involved). Should agreement not be reached at this level, the issue will be resolved by the Office of Water senior management team (Office and Division directors), with the assistance of the Quality Assurance Manager, as needed. The Office of Water Assistant Administrator has final authority to resolve disputes involving Office of Water quality system issues.